

CLAIMS.

- sub 7A1
1. A protein having one or more immunoreactive and/or antigenic determinants of Eimeria lactate dehydrogenase (LDH), said LDH having a relative monomeric molecular mass of about 37,000.
 - sub 7A1
 2. A protein according to claim 1 wherein the Eimeria species is Eimeria acervulina.
 - sub 7A1
 3. A protein according to claim 1 characterized in that it comprises at least part of the amino acid sequence shown in SEQ ID NO. 2 or a biologically functional equivalent thereof.
 4. A nucleic acid sequence encoding a protein according to any one of claims 1 to 3.
 5. A nucleic acid sequence according to claim 4 characterized in that the nucleic acid sequence contains at least part of the DNA sequence shown in SEQ ID NO. 1.
 6. A recombinant nucleic acid molecule comprising a nucleic acid sequence according to claim 4 or 5 operatively linked to expression control sequences enabling expression of said nucleic acid sequence.
 7. A recombinant vector comprising a nucleic acid sequence according to claim 4 or 5.
 8. A recombinant vector according to claim 7 characterized in that the nucleic acid sequence is operatively linked to expression control sequences.

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9. A host cell or organism transformed with a nucleic acid sequence according to claim 4 or 5 or a recombinant nucleic acid molecule according to claim 6 or a recombinant vector molecule according to claim 7 or 8.

10. A process for expressing the protein according to any one of claims 1 to 3 comprising culturing a host cell according to claim 9.

11. A vaccine for the protection of poultry against coccidiosis characterized in that it comprises a protein according to any one of claims 1 to 3, a recombinant nucleic acid molecule according to claim 6, a recombinant vector according to claim 7 or claim 8, or a host cell or organism according to claim 9 together with a pharmaceutically acceptable carrier.

12. A process for the preparation of a coccidiosis vaccine comprising the steps of culturing an infected host cell according to claim 9, collecting the recombinant vector and formulating said recombinant vector into a pharmaceutical preparation with immunizing activity.

13. A process for the preparation of a coccidiosis vaccine comprising formulating a protein according to any one of claims 1 to 3 or a protein prepared according to the process of claim 10 into a pharmaceutical preparation with immunizing activity.

14. An antibody or antiserum immuno-reactive with a protein according to any one of claims 1 to 3.

15. A method for the protection of poultry against coccidiosis comprising administering a vaccine according to claim 11 to the birds.

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sub A2

sub A3

add B4